



County Borough of Blackpool.

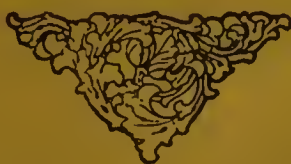
Annual Report

for the year 1923, by

E. W. Rees Jones

M.D., D.P.H.,

Medical Officer of Health & Medical
Superintendent to the Infectious
Diseases Hospital.





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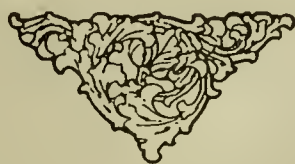
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PUBLIC HEALTH OFFICE,
BLACKPOOL.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I submit herewith my Annual Report for the year 1923.

The Health of the town has been satisfactory and there has not been an undue prevalence of any Infectious Diseases.

The Vital Statistics are generally satisfactory. The Birth Rate, as is usual in this town is low, but as I have explained in previous reports, this is largely due to the composition of the population. The Death Rate is slightly lower than that of last year, but there is still room for improvement. The portion of my report dealing with this matter shows that the rate is calculated on the Registrar General's estimate of the population, which, in my opinion, is below the actual. I have dealt at some length with the Analysis of Deaths in the body of the report, and I trust you will give these observations your consideration. The Infant Mortality is low, but we have not yet reached our aim of a figure of 50.

The general work of the Department has proceeded much as in previous years, and is detailed in the pages which follow.

The Maternity Home has proved a great boon, and I trust that our accommodation will soon be extended. I hope in my next report to deal at greater length with the subject of Ante-natal Care.

The main subject which is occupying our attention at the present time is an extension and rearrangement of our Hospital provision for Tubercular and Infectious Diseases, Maternity Cases, and Venereal Diseases.

I commend to you for your approval the loyal and efficient work which has been carried out by all members of my staff.

I beg to remain,

Mr. Chairman and Gentlemen,

Your faithful servant,

E. W. REES JONES.

12th April, 1924.

HEALTH COMMITTEE, 1923.

Mr. Councillor	H. BROOKS, J.P. (Mayor), from Nov. 1922.
„ Alderman	HAMPSON, J.P., Chairman.
„ „	HILL, J.P., Vice-Chairman.
„ „	BROWN, J.P.
„ „	J. R. GATH, J.P.
„ Councillor	ASHTON.
„ „	BAGOT (from March, 1923).
„ „	BODEN (to November, 1923).
„ „	BOOTHROYD.
„ „	DUCKWORTH.
„ „	EAVES, J.P. (to March, 1923).
„ „	G. W. GATH.
„ „	HALSTEAD.
„ „	MASHETER, J.P. (to November, 1923).
„ „	MILLINGTON.
„ „	RICE.
„ „	TOMLINSON.
„ „	WHITTAKER, J.P.

HEALTH GENERAL SUB-COMMITTEE

Mr. Councillor	H. BROOKS, J.P. (Mayor), from Nov., 1922.
„ Alderman	HAMPSON, J.P., Chairman.
„ „	HILL, J.P., Vice-Chairman.
„ „	BROWN, J.P.
„ „	J. R. GATH, J.P.
„ Councillor	BODEN.
„ „	DUCKWORTH.
„ „	G. W. GATH.
„ „	HALSTEAD.
„ „	MASHETER, J.P. (to November, 1923).
„ „	WHITTAKER, J.P.

MATERNITY AND CHILD WELFARE SUB-COMMITTEE

Mr. Councillor	H. BROOKS, J.P. (Mayor), from Nov., 1922.
„ Alderman	HAMPSON, J.P., Chairman
„ „	HILL, J.P., Vice-Chairman.
„ „	BROWN, J.P.
„ Councillor	BAGOT (from November, 1923).
„ „	BOOTHROYD.
„ „	EAVES, J.P. (to March, 1923).
„ „	G. W. GATH (from November, 1923).
„ „	MASHETER, J.P. (to November, 1923).
„ „	RICE.
„ „	TOMLINSON.
Mrs. A. OLIVER.	
„	WINTERBOTTOM.
„	WOODHEAD.

TUBERCULOSIS SUB-COMMITTEE.

Mr. Councillor	H. BROOKS, J.P. (Mayor), from Nov., 1922.
Mr. Alderman	HAMPSON, J.P., Chairman.
„ „	HILL, J.P., Vice-Chairman.
„ Councillor	BOOTHROYD.
„ „	HALSTEAD.
„ „	TOMLINSON.
„ „	MASHETER, J.P. (to November, 1923).
„ „	RICE (from November, 1923).
„	D. J. BAILEY.
Dr. H. T. BARTON.	
Mr. J. H. HURSTFIELD.	

General Statistics.



Area (exclusive of foreshore)	5,273 acres
Area of foreshore	1,121 „
Number of inhabited houses	19,288
Do. empty houses	619
Population (Census, 1921)	99,640
Do. (corrected by Registrar General for 1921) ...	73,800
Do. (do. do. 1922) ...	74,050
Do. (do. do. 1923) ...	75,130
Rateable value : General District Rate	£870,336
Borough Rate	£883,359
Sum represented by a penny rate (General District) ...	£3,670

It will be noted from the above figures that, according to the estimate of the Registrar General, there is an increase of only 1,080 in our population in twelve months, in spite of the fact that the actual number of inhabited houses shows an increase of 896. It is therefore obvious that the estimates of the Registrar General are very considerably below the actual.

Based on the assumption of a 75,130 population, the density of population of the whole town, and of each ward, is as follows :—

Blackpool ...	14.24 persons per acre.
Bispham	2.27
Warbreck	10.27
Claremont... ..	44.56
Talbot	36.05
Bank Hey... ..	43.24
Brunswick	34.07
Foxhall	48.34
Tyldesley	22.27
Alexandra	30.25
Victoria... ..	11.53
Waterloo	7.20
Layton	11.66
Marton	15.31

The following Table gives the actual area and population for the town generally, and each of the wards :—

	Area in Acres.	Population.		Area in Acres.	Population.
Blackpool ...	5,273	75,130	Foxhall ...	180	8,699
Bispham ...	1,660	3,775	Tyldesley ...	248	5,524
Warbreck ...	370	3,799	Alexandra ...	196	5,930
Claremont ...	157	6,997	Victoria ...	377	4,347
Talbot ...	191	6,886	Waterloo ...	547	3,939
Bank Hey ...	126	5,449	Layton ...	632	7,371
Brunswick ...	181	6,167	Marton ...	408	6,246

Extracts from Vital Statistics.

				Total.		M.	F.
Births : Legitimate	...	...	...	1,020	...	534	486
Illegitimate	...	...	...	89	...	36	53
Birth Rate	...	...	...	...	...	14.76	per 1,000
Deaths	...	...	...	...	...		1084
Death Rate	...	...	...	...	...	14.43	per 1,000

Number of women dying in or in consequence of child birth :

(a) From Sepsis	...	...	...	...	...	...	2
(b) „ other causes	...	...	...	...	...	...	7

Infant Mortality per 1,000 :

Total	...	...	...	...	...	70.3
Legitimate	...	...	...	...	...	61.4
Illegitimate	...	...	...	...	...	112.3

Deaths from Measles (all ages)	...	...	...	...	...	...	2
Do. Whooping Cough (all ages)	...	...	...	...	...	...	3
Do. Diarrhoea (under 2 years)	...	...	...	...	...	...	2

(a) **Births.**—During the year 1,109 births were registered, including 8 in the Kirkham Workhouse. These, divided into sexes for the four quarters of the year are as follows :—

	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total.
Males.....	136	146	171	117	570
Females ...	146	137	139	117	539
Total	282	283	310	234	1109

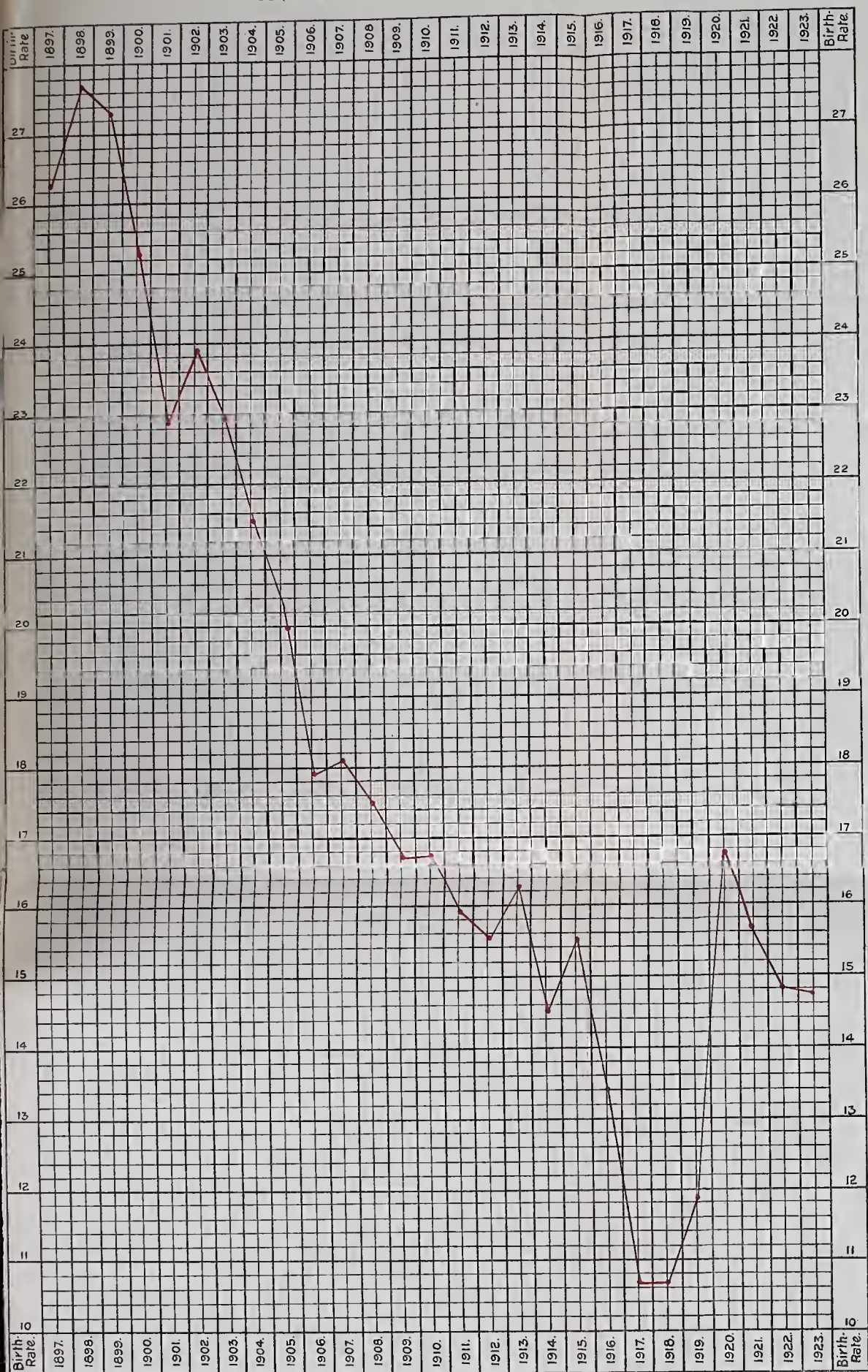
The birth rate for the year on the gross population was 14.76 per 1,000. It will be observed from the chart facing this page, and also from the table on page 7, that the birth rate from the year 1878 has shewn a steady and continuous decline, until the year 1918, when it reached the very low figure of 10.63 per 1,000 of the population. There was an upward tendency in the rate for the years 1918, 1919, and 1920, but this has not been maintained for the years 1921, 1922 and 1923. The comparatively low birth rate is, to some extent, attributable to the lower percentage of married women of child bearing age in comparison with that of industrial towns. It is possible also that the shortage of houses suitable for young married couples may have some contributing influence in producing a low birth rate.

The comparison of the 1923 figure for other portions of the country is as follows :—

England and Wales	...	...	...	19.7 per 1,000
105 Great Towns ...	...	...	...	20.4 „
157 Smaller Towns	...	...	...	19.8 „
London ...	...	...	...	20.2 „
Blackpool ...	...	...	...	14.8 „

The earliest recorded birth rate which I have of Blackpool is for the year 1878, when with a population of 13,000, there was a rate of 38.8 per 1,000. I have prepared a table based on the same lines as a table in the Annual Report of the Registrar General for the year 1907. The rate for 1878 is taken as a standard and is called 100, and the subsequent years are given as percentages compared with this year, 1878 :—

BIRTH-RATES FOR THE YEARS 1897-1923.



Year.	Birth Rate Blackpool.	Birth rate Blackpool compared with rate for 1878, taken as 100.	Birth rate England and Wales.	Birth rate England & Wales compared with rate for 1878, taken as 100.
1878	38.8	100	35.6	100
1879	36.6	94.3	34.7	97.5
1880	34.0	87.6	34.2	96.1
1881	30.6	78.9	33.9	95.2
1882	30.0	77.3	33.8	94.9
1883	30.0	77.3	33.5	94.1
1884	29.8	76.8	33.6	94.3
1885	27.4	70.6	32.9	92.4
1886	25.9	66.8	32.8	92.1
1887	25.3	65.2	31.9	89.6
1888	24.5	63.1	31.2	87.6
1889	26.5	68.3	31.1	87.4
1890	23.7	61.1	30.2	84.8
1891	22.3	57.5	31.4	88.2
1892	24.0	61.9	30.4	85.4
1893	22.4	57.7	30.7	86.2
1894	23.9	61.6	29.6	83.1
1895	26.7	68.8	30.3	85.1
1896	25.7	66.2	29.6	83.1
1897	26.25	67.7	29.6	83.1
1898	27.74	71.5	29.3	82.3
1899	27.34	70.5	29.1	81.7
1900	25.27	65.1	28.7	80.6
1901	22.90	59.0	28.5	80.1
1902	23.96	61.8	28.5	80.1
1903	22.97	59.2	28.4	79.8
1904	21.53	55.5	27.9	78.4
1905	20.30	52.3	27.2	76.6
1906	17.91	46.2	27.1	76.1
1907	18.09	46.6	26.3	73.9
1908	17.54	45.2	26.2	73.6
1909	16.70	43.0	25.6	71.9
1910	16.74	43.1	24.8	69.7
1911	15.97	41.2	24.4	68.5
1912	15.50	39.9	23.8	66.9
1913	16.25	41.9	23.9	67.1
1914	14.47	37.3	23.8	66.9
1915	15.54	40.0	21.8	61.2
1916	13.40	34.5	21.6	60.7
1917	10.64	27.4	17.8	50.0
1918	10.63	27.4	17.7	49.7
1919	11.84	30.5	18.5	52.0
1920	16.71	43.1	25.4	71.3
1921	15.61	40.2	22.4	62.9
1922	14.80	38.1	20.6	57.8
1923	14.76	38.0	19.7	55.3

There were 89 illegitimate children born during the year, including 8 at Kirkham Workhouse. This figure gives the following rates :—

- (1) 1.18 per 1,000 of the inhabitants.
- (2) 4.96 per 1,000 females of conceptive age.*
- (3) 8.02 per cent. of the total births.

** Calculated on there being 17,927 females at child-bearing age—20 to 45.*

These figures for the past few years have been as follows :—

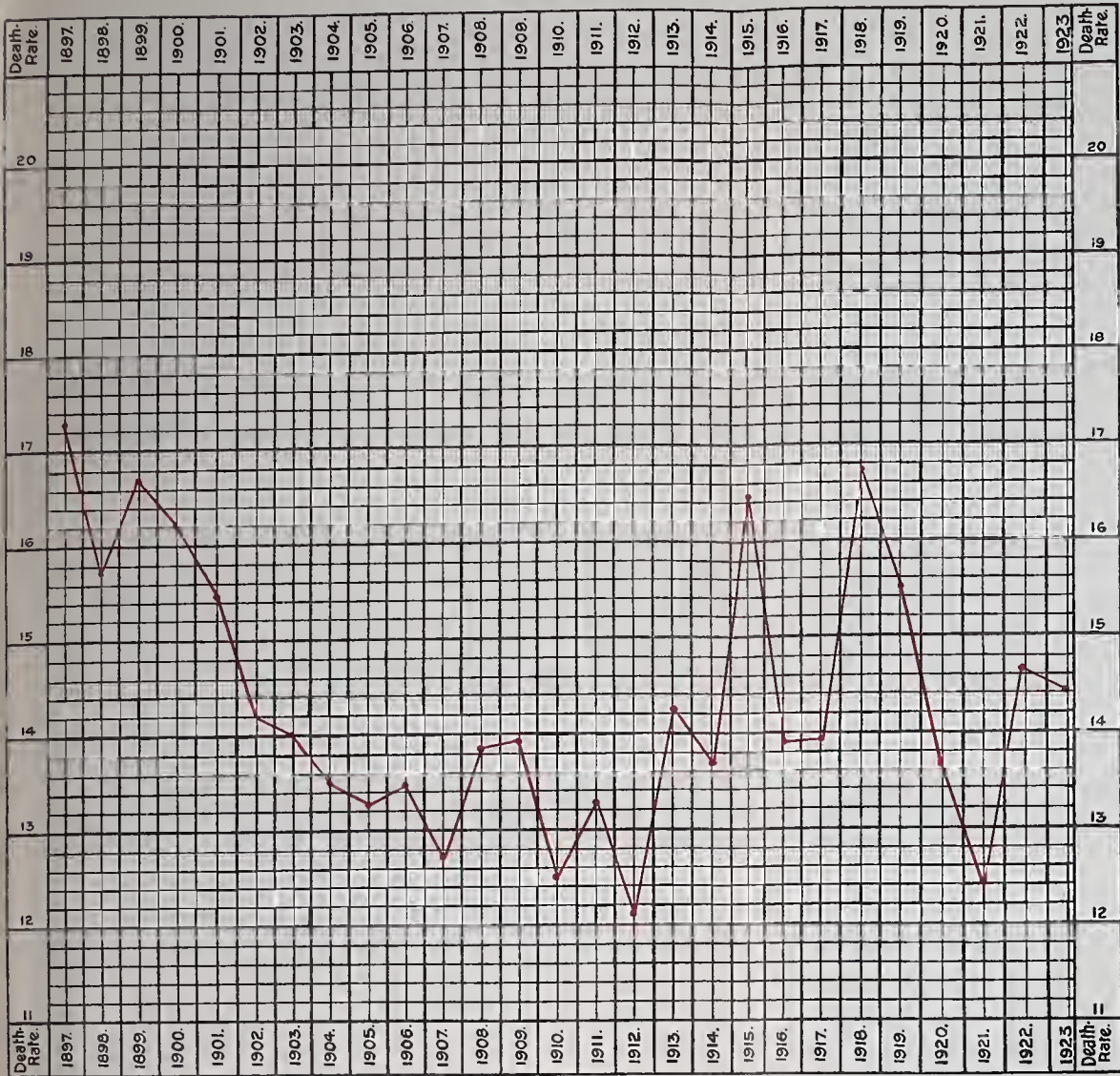
1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906
1.18	1.17	1.44	1.39	1.78	1.18	1.23	1.18	1.18	1.03	1.31	1.45	1.29	1.13	1.35	1.14	1.08	1.14
4.96	4.92	6.02	5.82	7.47	4.98	5.14	4.95	4.96	4.17	5.48	6.07	5.27	4.61	5.50	4.64	4.39	4.64
8.02	7.93	9.20	8.31	14.98	11.18	11.52	8.81	7.62	6.87	8.05	9.35	8.10	6.76	8.09	6.49	5.96	6.35

The second figure, i.e., the proportion of illegitimate births to women at conceptive ages, is the one which represents best the progress of illegitimacy in the country. It is not necessary to amplify the figures, as it will be obvious that they are not favourable, though the 1923 rates show an improvement upon many of the previous years.

(b) **Deaths.** The number of deaths of Blackpool residents which occurred during the year was 1084. This figure includes the deaths of 60 persons in the Kirkham Workhouse, and of 48 persons in areas outside Blackpool.

The deaths, divided into sexes for the four quarters of the year, were as follows :—

	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total.
Males.....	128	133	126	149	536
Females ...	146	132	120	150	548
Total ...	274	265	246	299	1084



The death rate for the year was 14.43 per 1,000 of the population, and the progress of the rate year by year will be seen on reference to the chart facing this page. The comparison of this rate with other portions of the country is as follows :—

England and Wales	...	...	...	11.6 per 1,000
105 Great Towns	...	...	...	11.6 „
157 Smaller Towns	...	...	...	10.6 „
London	...	...	...	11.2 „
Blackpool	...	...	...	14.4 „

The excess of the Blackpool death rate over that for other portions is more apparent than real, and is accounted for by the under-estimate of the population to which reference has previously been made. The average number of persons per house at the last census was 4.5, and, allowing for a reduction in this average due to the number of houses built since, the present estimate of population should be near 85,000, which would bring our death rate on a level with that of England and Wales generally.

The percentages of the deaths in the various age groups, with similar figures for a series of previous years are as follows :—

Age Period.	1923.	1922.	1921.	1920.	1919.	1918.	1917.	1916.	1915.
Under 12 months ...	7.1	6.9	8.4	8.5	7.72	7.89	6.9	9.1	12.1
1, and under 5 years ...	1.7	2.6	2.9	2.6	2.86	5.29	3.0	4.8	5.1
5, and under 65 years ...	48.1	48.6	45.1	48.9	52.43	55.37	50.3	47.2	46.9
65 years and over ...	43.1	41.9	43.5	39.9	37.00	31.45	39.7	38.9	35.8

From this set of figures it will be seen that there is no great disparity between the 1923 figures and those for the immediately preceding years, but on looking through the whole series it is seen that the tendency is for the percentage of deaths under five years to show a decline, and the percentage above the age of 65 years to show an increase. Expressed in other words, the average age at death is higher, and the expectation of life is increased. A comparison of the causes of deaths—not as regards individual diseases, but as regards groups, is as follows :—

		Percentage of Total Deaths.						
		1923.	1922.	1921.	1920.	1919.	1918.	1917.
I.	General Diseases	24.1	28.3	28.7	27.4	30.1	38.6	26.5
II.	Diseases of the Nervous System and of the Organs of Special Sense	12.9	11.9	10.6	11.4	10.1	8.7	12.8
III.	Diseases of the Circulatory System	18.1	16.3	17.2	16.6	14.6	10.8	11.8
IV.	Diseases of the Respiratory System	16.6	17.0	15.3	16.5	18.2	16.3	17.9
V.	Diseases of the Digestive System	5.9	5.4	5.1	6.0	4.5	4.9	7.1
VI.	Non-Venereal Diseases of the Genito- Urinary System and Annexa	5.4	4.7	5.5	5.7	4.8	5.4	6.2
VII.	The Puerperal State	1.0	0.9	0.4	1.2	1.0	0.7	0.7
VIII.	Diseases of the Skin and the Cellular Tissue	0.3	0.1	0.2	0.5	0.4	0.1	0.6
IX.	Diseases of the Bones and of the Organs of Locomotion	0.1	0.5	0.2	0.1	0.2	0.0	0.4
X.	Malformations	0.4	0.5	0.5	1.0	0.6	0.8	0.9
XI.	Diseases of early Infancy	3.3	2.7	3.2	3.1	4.4	4.0	2.4
XII.	Old Age	8.2	6.9	7.9	6.6	6.1	5.6	8.1
XIII.	Affections produced by external causes	2.9	3.1	3.9	2.5	2.7	2.0	3.1
XIV.	Ill-defined causes	0.8	1.7	1.2	1.4	2.1	2.0	1.6

I have extracted from our death returns of the past 10 years the actual number of deaths from various individual diseases which contribute largely to our death rate, and these are as follows :—

	1923.	1922.	1921.	1920.	1919.	1918.	1917.	1916.	1915.	1914.
Influenza ...	8	47	9	10	80	129	6	16	15	2
Pulmonary Tuberculosis ...	46	65	56	61	47	87	63	67	70	68
Other forms Tuberculosis ...	19	17	24	17	22	27	13	20	16	22
Cancer ...	133	123	128	112	108	102	103	93	85	94
Diabetes ...	20	15	8	14	16	8	9	18	13	15
Anæmia ...	11	9	8	14	14	12	9	6	7	9
Apoplexy ...	78	79	55	64	57	53	65	70	50	61
Heart Diseases ...	137	123	113	111	124	82	83	74	111	85
Bronchitis...	97	103	80	80	122	81	94	108	120	63
Pneumonia ...	66	63	51	70	61	81	50	49	78	52
Appendicitis ...	9	6	3	12	4	4	8	4	8	9
Bright's Disease ...	42	33	38	38	38	37	33	23	42	30
Old Age ...	89	72	71	63	63	61	70	62	70	52
Accidental Deaths	25	20	26	10	20	10	23	13	21	20

From these figures it will be observed that the deaths from Tuberculosis show a decline, while those from Cancer, Apoplexy, Heart Diseases, Bronchitis, Bright's Disease, and Old Age show an increase.

I have given in this portion of the Report several tables and a large quantity of statistics on the subject of Deaths with the object of providing some material for considering whether any extended and specialised efforts could be made to reduce our death rate. It appears to me that with the exception of Cancer, Bronchitis and Pneumonia, we shall have to rely mainly upon general sanitary supervision, and I think that with still greater activities of the Health organisation, and the diminished stress of social conditions and revival of trade, which we hope soon to see, the toll upon our population will be lessened. With regard to the three special diseases which I have mentioned, Cancer is dealt with at a later stage. Bronchitis and Pneumonia will be less prevalent when our housing conditions are improved, and it appears to me that extended hospital provision is desirable for cases of these diseases.

By the courtesy of the Medical Officers of the various Lancashire towns, I am able to give the following comparisons of some of their statistics with those of Blackpool.

Town.	Estimated Population.	Death Rate.	Infant Mortality Rate.
Blackpool	75,130	14.4	70.3
Barrow-in-Furness ...	75,690	10.3	90.5
Blackburn	129,000	13.4	100.0
Bolton	182,200	12.8	85.0
Bootle	81,580	13.1	85.0
Burnley	104,800	13.4	103.0
Oldham	147,500	16.0	110.0
Preston	121,700	13.77	98.0
Rochdale	92,710	13.8	76.0
Southport	72,410	13.5	65.0
Warrington	78,910	10.6	72.0
St. Helens	107,100	11.9	91.3
Wigan	91,640	13.40	101.0

It will be noted that while our Infant Mortality Rate is quite satisfactory, our death rate is above the average, but as I have explained in a previous part of this Report, our rate is calculated on an estimated population of the Registrar General's which, in my opinion, is too low.

Of the 1,084 resident deaths in 1923 the causes of 1,000 or 92.3 per cent., were certified by medical practitioners. Inquests were held respecting 51, or 4.7 per cent., whilst the remaining 33, or 3.0 per cent., were uncertified.

The Ward statistics with regard to death rates are as follows:—

Wards.	Death Rate 1923.
Bispham	12.7
Warbreck	11.3
Claremont ...	12.7
Talbot.....	16.9
Bank Hey	13.0
Brunswick....	12.5
Foxhall	11.8
Tyldesley.....	15.4
Alexandra	11.8
Victoria	14.7
Waterloo	14.7
Layton.....	12.9
Marton.....	26.2

Cancer continues to make its large toll upon the population, and in 1923, 133 deaths were attributable to this disease. I here reproduce a table which appeared in my 1907 report, with the figures for the subsequent years added :—

YEAR.	Number of Deaths.	Death Rate.	England and Wales.
1895	16	0.486	0.753
1896	17	0.464	0.762
1897	30	0.746	0.785
1898	22	0.484	0.799
1899	34	0.705	0.826
1900	47	0.937	0.820
1901	54	1.064	0.842
1902	47	0.901	0.844
1903	52	0.981	0.872
1904	41	0.755	0.877
1905	54	0.969	0.885
1906	54	0.946	0.917
1907	52	0.890	0.909
1908	51	0.854	0.923
1909	59	0.960	0.952
1910	46	0.765	0.967
1911	72	1.179	0.993
1912	69	1.111	1.019
1913	92	1.433	1.064
1914	94	1.416	1.069
1915	85	1.323	1.121
1916	93	1.475	1.166
1917	103	1.655	1.210
1918	102	1.580	1.218
1919	108	1.591	1.145
1920	112	1.588	1.161
1921	128	1.734	1.215
1922	123	1.661	*
1923	133	1.770	*

* Figures not yet available.

A considerable amount of research work in regard to this disease is being carried out by Government Departments and scientific associations, and periodical reports are being issued, and are studied carefully by me. Up to the present, however, only the three following statements can be made :—

- (1) The causation of the disease remains obscure.
- (2) There is no indication that the disease is infectious or contagious.
- (3) The disease is curable if detected at an early stage.

On the instructions of the Health Committee the following advertisement appears quarterly in our local press, and pamphlets similarly worded are freely issued :—

COUNTY BOROUGH OF BLACKPOOL.

PUBLIC HEALTH DEPARTMENT.

C A N C E R.

Little is known of the "Cause of Cancer," but there is no indication that it is hereditary or infectious. There are no special "Cancer Houses," "Cancer Areas," or "Cancer Families."

One of the causes of Cancer is prolonged irritation, as for instance, by broken teeth, short pipes, etc., causing Cancer of the tongue or lip. All sources of irritation of this or similar nature should therefore be avoided.

Cancer is usually painless in the early stages, and is sometimes painless throughout its course.

With regard to the treatment of Cancer, it cannot be too strongly emphasised that the success depends upon early recognition of the disease.

If diagnosed in its early stage and before the symptom of pain appears, complete cure can frequently be effected.

The following are some of the early signs of Cancer—and any person noting any of them should promptly place himself under medical treatment :—

1. A lump or swelling in a woman's breast after the age of 40 years.
2. Loss of blood other than at normal periods or after the change of life.
3. A wart, sore, or ulcer on the lower lip, tongue or inside of the mouth in a man over 45 years of age.
4. Persistent hoarseness.
5. Bleeding from the bowels after 45 years of age.

E. W. REES JONES, M.D.,

Medical Officer of Health,

October, 1923.

BLACKPOOL.

Though it is yet too early to look for any definite results of the publishing of the above information, it will be interesting to note if there is any increase in the cases of early Cancer under treatment by the medical practitioners, and in due course I will endeavour to obtain this information. If there is this increase, it will undoubtedly have an effect in reducing our death rate from the disease.

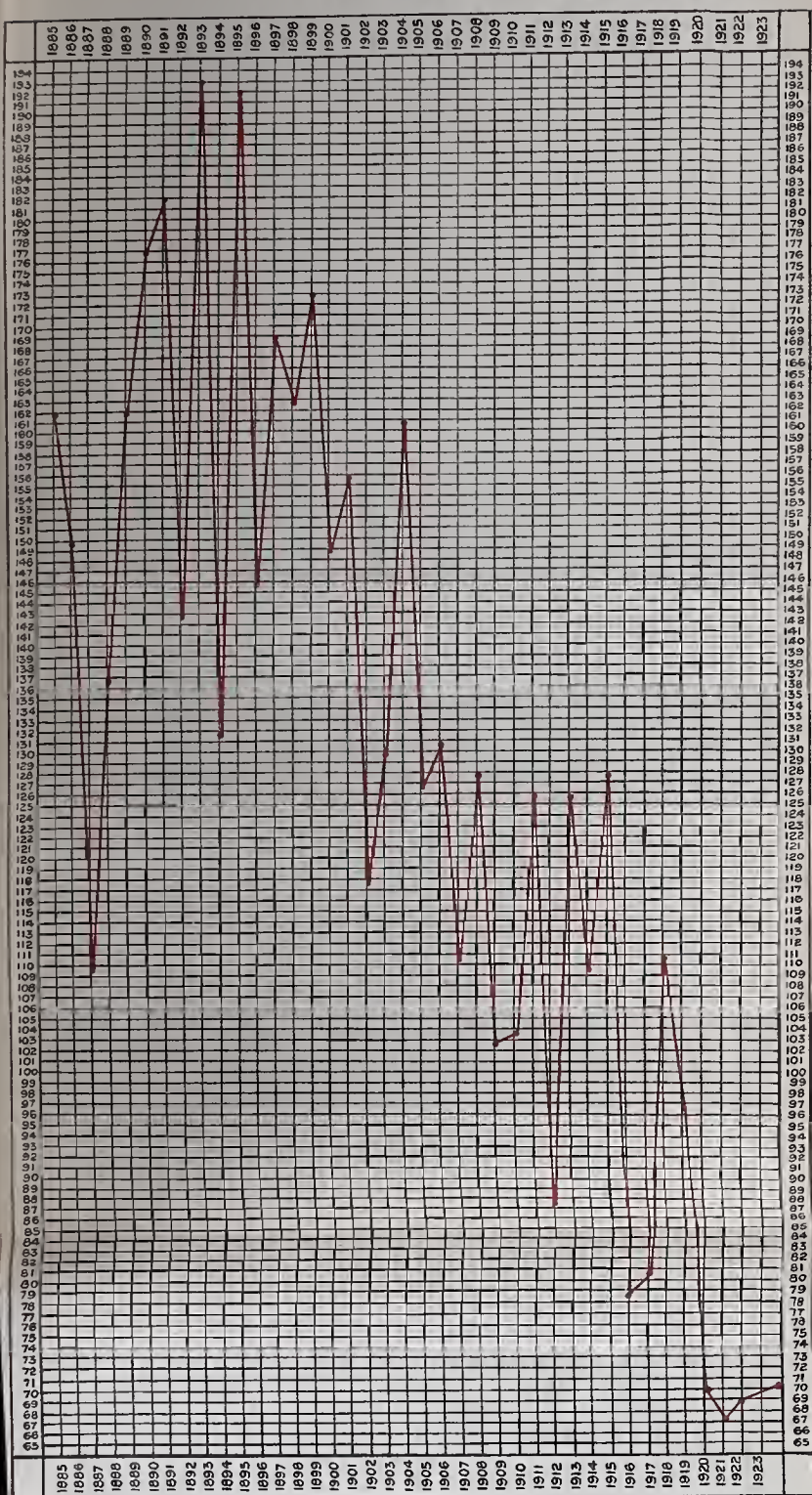
Infantile Deaths.—Seventy-eight children under the age of 12 months died during 1923, and the Infantile Mortality was at the rate of 70.3 per 1,000 births.

The following table gives the infant death rate per 1,000 births, for the past 44 years, and the Chart represents in a more diagrammatic manner the fluctuations from year to year—

INFANTILE MORTALITY 1879—1923.
RATE PER 1,000 BIRTHS.

Year.	Blackpool	England and Wales.
1879	122	135
1880	206	153
1881	126	130
1882	221	141
1883	123	137
1884	140	147
1885	162	138
1886	150	149
1887	110	145
1888	137	136
1889	162	144
1890	177	151
1891	182	149
1892	143	148
1893	193	159
1894	132	137
1895	192	161
1896	146	148
1897	169	156
1898	163	160
1899	173	163
1900	149	154
1901	156	151
1902	118	133
1903	130	132
1904	161	145
1905	127	128
1906	131	133
1907	111	118
1908	128	121
1909	103	109
1910	104	106
1911	126	130
1912	88	95
1913	126	109
1914	110	105
1915	128	110
1916	79	86
1917	81	81
1918	111	97
1919	97	89
1920	70	80
1921	67	83
1922	68	77
Mean of 44 years	134	128
1923	70	69

CHART SHOWING INFANTILE MORTALITY from 1885 to 1923.





The comparison of our Infant Mortality Rate with that of other parts of the country, and the rate in each of the four quarters of the year, is as follows :—

England and Wales	...	...	...	...	...	69
105 Great Towns	...	...	...	...	...	72
155 Smaller Towns	...	...	...	...	...	69
London ...	...	...	...	...	...	60
Blackpool	...	...	...	...	...	70

The rates for the four quarters of the year were as follows :—

1st quarter	...	...	...	...	...	60
2nd „	...	...	...	...	...	64
3rd „	...	...	...	...	...	58
4th „	...	...	...	...	...	107

The chart facing page 16 will indicate clearly that our present position regarding Infant Mortality is highly satisfactory as compared with previous years, and I am confident that with persistence in and extension of the special work which we are carrying out, our rate will show a still further fall.

Fifty of the cases, or 64 per cent. of the total, died before reaching the age of three months. It is therefore evident that our attention must be specially directed to babies under this age and even prior to birth. In cases of repeated still-births the attention of the medical practitioners has been called to the desirability of having the mothers tested for the Wasserman reaction.

The causation of the Infantile Deaths according to groups of diseases, etc., is as follows :—

DEATHS UNDER ONE.—TOTAL.

CAUSES.	YEAR		QUARTERS						FEEDING			Mother employed away from home	No Information	Illegitimate.	
	Under 3 mths	Total	First	Second		Third		Fourth		Not Fed	Breast Fed				Hand Fed partly or entirely
				Under 3 mths	Total	Under 3 mths	Total	Under 3 mths	Total						
1—Common Infectious Diseases (Measles, Diphtheria and Whooping Cough)	1	3	—	—	1	1	1	1	—	1	—	1	2	—	—
2—Diarrhoeal Diseases :— Diarrhoea, Enteritis, and Gastritis.	—	4	—	—	—	—	—	1	—	3	—	1	2	1	—
3—Congenital Malformations... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4—Premature Birth, Debility, Icterus, etc.	28	29	6	5	5	11	11	6	7	15	3	6	5	—	5
5—Tubercular Diseases	1	2	—	—	—	1	1	—	—	—	1	1	—	—	—
6—Other Causes { Convulsions Bronchitis Pneumonia Other causes	3	5	—	—	2	—	1	1	1	1	1	3	1	1	2
	1	5	—	—	—	—	—	1	3	—	2	3	—	—	—
	2	10	—	1	3	—	—	1	5	—	2	6	2	—	1
	14	20	5	3	5	3	3	3	5	5	2	8	5	1	2
Totals	50	78	11	11	18	16	12	25	21	13	31	2	13	2	10

Further reference is made to this subject in the section of the Report dealing with our Maternity and Child Welfare Scheme.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

Cases of Infectious Diseases notified during the years 1896-1923 (inclusive).

	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Smallpox	—	—	—	—	—	4	2	22	8	3	9	—	—	—	—	—	—	—	—	—	3	—	—	—	1	—	—	—
Diphtheria and Membranous Croup	6	7	10	13	24	134	75	40	46	49	54	84	61	96	41	40	55	41	22	29	42	67	77	74	178	52	28	25
Erysipelas.....	—	—	—	—	14	13	13	19	26	17	18	13	18	38	20	26	23	24	22	29	19	12	20	22	38	13	23	22
Scarlet Fever	208	177	77	141	187	271	197	257	179	200	183	177	238	348	181	84	83	102	145	316	144	88	60	95	229	220	179	154
Typhus Fever	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever.....	66	50	67	59	68	58	70	42	28	51	39	41	65	48	12	39	17	13	32	35	6	7	10	6	1	6	7	6
Puerperal Fever	1	2	5	5	3	2	2	3	5	3	2	2	3	4	7	5	6	5	3	8	4	2	5	4	9	4	—	9
Measles.....	148	794	259	370	302	532	863	127	1386	871	389	309	1268	834	660	1181	720	1232	690	680	1049	1168	1409	369	1415	43	1125	624
Rotheln.....	2	—	—	1	2	5	5	5	13	27	6	1	—	—	—	—	—	—	—	—	—	—	—	—	—	32	21	23
Tuberculosis :																												
(a) Pulmonary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	44	133	131	120	169	143	188	202	151	119	127	121	107
(b) Non-pulmonary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46	37	25	35	53	63	67	44	33	27	22
Cerebro-Spinal Meningitis.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	10	3	1	—	1	—	—
Poliomylitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	1	1	—	1	1	2	—	—
Ophthalmia Neona- torum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	11	18	14	21	28	37	18	37	48
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	—	—
Totals.....	431	1031	418	589	600	1019	1227	515	1691	1221	700	627	1653	1368	921	1419	1040	1594	1088	1303	1467	1610	1670	818	2073	554	1568	1040

AGE PERIODS.																											
Disease.	Total Notified.	Admitted to Hospital.	CASES NOTIFIED.										DEATHS.					Total Deaths									
			Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 65	65 and over	Under 1	1 to 2	2 to 3		3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 65	65 and over
Diphtheria ...	25	20	—	—	1	2	2	9	6	2	2	1	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—
Scarlet Fever	154	144	—	1	6	9	8	56	45	11	14	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Enteric Fever	6	4	—	—	—	—	—	—	—	1	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Puerperal Fever	9	9	—	—	—	—	—	—	—	—	6	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pneumonia ...	77	21	2	4	5	9	1	5	3	5	14	10	20	5	11	3	—	1	—	—	—	1	7	6	25	12	
Cerebro-Spinal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Lethargica...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Erysipelas ...	22	4	—	—	—	1	—	—	1	3	3	4	7	3	—	—	—	—	—	—	—	—	—	1	1	—	
Chickenpox	376	11	16	30	32	27	19	231	17	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Measles ...	624	62	21	62	68	69	57	303	30	8	4	2	—	—	1	1	—	—	—	—	—	—	—	—	—	—	
German Measles	23	—	2	—	—	1	5	9	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Whooping Cough ...	76	—	7	1	7	6	9	45	—	—	—	1	—	—	2	—	—	—	1	—	—	—	—	—	—	3	

Scarlet Fever.—154 cases, one death. The comparative incidence with previous years will be seen on the table on page 19. No particular portion of the town was affected, nor was the disease more prevalent in any particular period of the year. 144 of the cases (93.5%) were removed to the Sanatorium.

Diphtheria.—25 cases, two deaths. 20 of the cases, or 80.0% were removed to the Sanatorium. No special part of the town was affected. The administrative measures taken to deal with this disease are as follows:—Free distribution of anti-toxin to actual and suspected cases, bacteriological examinations and daily supervision of all contacts, school exclusion, and isolation of patients at the Sanatorium. The numbers of notifications is the smallest since the year 1914.

Small Pox.—No cases of this disease were reported during the year. In spite of our fortunate freedom, I cannot refrain from calling attention to the great dangers which are incurred by neglect of vaccination, and the country generally runs a risk of a devastating epidemic, because of its neglect. The contention that freedom from Small Pox may be obtained by stringent sanitary administration is erroneous. There is only one safeguard against Small Pox—viz., recent and efficient vaccination.

Enteric Fever.—Six cases, one death. This is a very low incidence. On reference to the table on page 19, it will be seen that during the earlier years there recorded—1895 to 1902—the notifications varied between 50 and 80, and the disappearance of the disease is due to the improved sanitary surroundings, including a pure food and water supply. Four of the cases were removed to the Sanatorium. In cases where the patients are treated at home, or where suspected cases are known to be under observation, typhoid pails are sent, into which the excreta are placed. These pails are collected daily by us and their contents cremated.

Measles.—624 cases, two deaths. 62 cases were removed to the Sanatorium for isolation and treatment. Measles remains a compulsorily notifiable disease in Blackpool. The disease was prevalent during the first seven months of the year, and especially during February. The remaining five months were comparatively free. From the table on page

20 it will be seen that half of the 624 cases were in children of school age. Only sixteen cases occurred in persons over school age. The two deaths were in children under two years of age. It cannot be too often repeated that Measles is especially dangerous to young children. The younger the child, the greater is the danger, and for every year in a child's life that an attack of Measles can be postponed the chances of complete recovery are enhanced.

Nine cases of **Puerperal Fever** were notified, all of which were removed to the Sanatorium for treatment. Two deaths occurred. 376 cases of **Chicken Pox** and 76 cases of **Whooping Cough** were reported to me, mainly by the School Attendance Officers. 47 cases of **Ophthalmia Neonatorum** were notified during the year, 25 of which were treated at the Sanatorium. All the cases recovered with unimpaired vision. Eleven deaths occurred from **Influenza** including deaths of three visitors. The months in which they occurred are as follows :—January 2, May 5, June 2, October 1, November 1. The administrative measures for dealing with Influenza are as follows : (1) Isolation and treatment at the Sanatorium, (2) provision of medical and nursing assistance to necessitous home cases, and (3) the issuing of information upon precautionary methods.

Pneumonia.—Although this disease is now compulsorily notifiable, only 77 cases were notified during the year, yet 66 deaths occurred. It is, therefore, obvious that a large number escaped notification. The administrative duties on the part of the Sanitary Authority are to provide, if necessary, medical and nursing services or hospital treatment ; and I think it is probable that the unnotified cases were those in which assistance from the Health Department was not necessary.

Tuberculosis.—All forms of Tuberculosis have been notifiable during the year, and the following notifications have been received :—Pulmonary 93, Non-Pulmonary 21, Total 114. 46 deaths occurred from this disease.

The following Table gives the cases and deaths divided into sexes and age groups :—

Age periods.	Pulmonary Tuberculosis				Non-Pulmonary Tuberculosis.			
	Notifications.		Deaths.		Notifications.		Deaths.	
	Males	Females	Males	Females	Males	Females	Males	Females
Under 5 years	1	—	—	—	2	2	2	6
5 to 15 years	6	10	—	—	5	7	4	—
15 to 25 years	6	8	6	5	—	1	2	—
25 to 35 years	13	17	4	7	1	2	1	—
35 to 45 years	13	7	8	5	—	—	1	—
Over 45 years	7	5	9	2	—	1	—	1
Totals	46	47	27	19	8	13	10	7

Except in cases where a desire to the contrary has been expressed, all notified cases have been visited by the Tuberculosis Officer, or by the Tuberculosis Nurse. The following visits have been paid :—

	Pulmonary.	Non-Pulmonary.	Total.
Primary Visits ...	125	29	154
Subsequent Visits	953	295	1,248
Total ...	...	...	1,402

Opportunities are taken on these visits to enquire into and advise upon the precautions which should be adopted for reducing the risk of infection of other members of the household, to enquire into social conditions and the ability to obtain sufficient nourishment and medical attendance, to enquire into the health of other members of the household, and to arrange for the medical examination of contacts by the Tuberculosis Officer.

The Tuberculosis Dispensary, at the Public Health Office, has been open throughout the year, and the Tuberculosis Medical Officer and Nurse are in attendance. The Dispensary serves the following functions :— (1) examination of suspected cases for medical practitioners ; (2) examination of contacts ; (3) sorting of cases for recommendations for treatment ; and (4) treatment of patients. The total number of patients who attended the Dispensary was 228, and 3,018 attendances were made by them. The wards of the Infectious Diseases Hospital, comprising 22 beds, approved by the Ministry of Health for the purpose, have been utilised throughout the year for the treatment of consumption. The patients are under the treatment of the Tuberculosis Officer and Medical Officer of Health. At the commencement of 1923, three cases were in hospital, and during the course of the year, 43 fresh cases were admitted. Of the 46 cases thus under treatment, 26 were discharged, 9 died, and four remained in at the end of the year. One patient was sent to the Meathop Sanatorium, ten to Crossley Sanatorium, Frodsham, four to Fairlight Sanatorium, Hastings, and one to Shropshire Orthopædic Hospital, Oswestry.

Three movable wooden shelters are provided, which are erected as required at the homes of patients,

Periodical disinfection is offered and urged in all cases of Tuberculosis, especially when there is any change of room, but this is not taken advantage of to the extent which is desirable.

The Corporation should consider the desirability of providing dental treatment for Tubercular patients.

The general scheme of dealing with Tuberculosis has remained as in former years, and the disappointing feature persists in that we do not get hold of the cases until the disease is advanced and when the prospect of cure is remote. The services of the Tuberculosis Officer might with much advantage be sought to a greater degree by medical practitioners and by the patients themselves.

The number of deaths and death-rates from Phthisis in the past twenty-one years have been as follows :—

Year.	Number of Deaths.	Death-rate for Residents.
1901	37	0.73
1902	45	0.86
1903	35	0.74
1904	47	0.86
1905	51	0.92
1906	39	0.68
1907	50	0.86
1908	47	0.86
1909	45	0.73
1910	38	0.63
1911	51	0.83
1912	49	0.79
1913	49	0.76
1914	71	1.07
1915	70	1.09
1916	67	1.06
1917	64	1.03
1918	87	1.34
1919	47	0.69
1920	61	0.86
1921	56	0.76
1922	65	0.87
1923	46	0.61

It will be noted that the number of deaths is the lowest since the year 1910, and that the death rate for residents is the lowest yet recorded. It is to be hoped that the large amount of work and money utilised for the control of this disease is beginning to bear fruit.

Venereal Diseases.—The Clinic has remained in operation throughout the year. Dr. Bartlett, the Assistant Medical Officer of Health, has carried out the duties of Venereal Diseases Officer, and he submits the following report :—

“ During the past twelve months the number of attendances at the Clinic has shown a slight increase in new cases, but the total attendance has slightly decreased. The number of patients discharged after the final test again shows an increase.

“ Within the last year many old cases of Gonorrhœa, who had ceased to attend when dry, but who had not passed the final test, have reported to me at the Clinic for various reasons, i.e., intention of getting married, to make sure that they were in a fit state for matrimony. Each of these individuals passed the final test and were duly discharged, the few shreds of epithelium and mucous in the urine probably not being of an infectious nature.

“ Since my last Report I have not had any further cases of Dermatitis, the reaction after the administration of the Salvarsan substitute now being used being practically nil, an occasional patient having complained of a little headache, or slight feeling of nausea. Such cases, however, one can usually trace to the patient not fulfilling the necessary preparation instructions before having the injection.

“ Many more patients are now availing themselves of the irrigation rooms which are kept open all day.

“ The In-patient wards have now been fitted with electric bells so that at any time of the day or night they can get into touch with the main Hospital Buildings.”

“ The hours of attendance are as follows :—

MALES :

Mondays—5 p.m. to 6 p.m.
 Wednesdays—11 a.m. to 12-30 p.m.
 Thursdays—11 a.m. to 12-30 p.m.
 Saturdays—11 a.m. to 12-30 p.m.

FEMALES :

Tuesdays—5 p.m. to 6-30 p.m.
 Fridays—11 a.m. to 12-30 p.m.

“ The following Salvarsan substitutes are kept at the Health Offices for distribution to Medical Practitioners who are qualified to receive them : N.A.B. Galyl (Intramuscular and Intravenous), Neo-Kharsivan, Neo-Salvarsan and Silber-Salvarsan.

A full statistical report upon the work carried out during the year has been prepared and forwarded to the Ministry of Health. As the scheme of treatment of Venereal Diseases has now been in operation for seven years, a summary of the work for each of the years is given in the following table :—

	1923.		Totals, 1923.	Totals, 1922.	Totals, 1921.	Totals, 1920.	Totals, 1919.	Totals, 1918.	Totals, 1917.
	Males. Females								
1. Number of patients under treatment 1st January, 1923	211	69	280	227	315	181	35	16	—
2. New out-patients	418	75	493	486	499	519	333	141	37
3. Total attendances of out-patients	4,696	1,750	6,440	7,404	8,180	6,839	3,092	1,574	326
4. Aggregate number of in-patient days ..	121	19	140	117	38	273	520	219	37
5. Specimens examined for Wassermann reaction	172		172	143	91	77	136	95	19

SCHOOL CLOSURE, 1923.

SCHOOL.	CAUSE.	CLOSED.	
		From.	To.
St. Cuthberts' Infants' School	Measles	14th Feb.	24th Feb.
Do. do.	do.	26th Feb.	2nd Mar.

School Exclusions.—The following are the lines upon which we work with regard to the exclusion of infected children from school :—

SCARLET FEVER.

- 1.—PATIENTS : (a) Hospital Cases. Two weeks after discharge.
- (b) Home Cases. Two weeks after disinfection.
- 2.—CONTACTS : (a) Hospital Cases. Two weeks after removal to Hospital.
- (b) Home Cases. Two weeks after disinfection.

DIPHTHERIA.

- 1.—PATIENTS : (a) Hospital Cases. Four weeks after discharge.
- (b) Home Cases. Four weeks after disinfection.
- 2.—CONTACTS : (a) Hospital Cases. Two weeks after removal to Hospital.
- (b) Home Cases. Four weeks after disinfection.

ENTERIC FEVER AND ERYSIPELAS.

CONTACTS need not be excluded from School.

MEASLES.

1.—PATIENTS : Four weeks from onset.

2.—CONTACTS : (a) Infant Scholars. Three weeks from onset of last case.

(b) Other Scholars :—

I.—If had Measles. Not to be excluded.

II.—If not had Measles. Three weeks after onset of last case.

WHOOPING COUGH.

PATIENTS : Six weeks, or as long as cough continues.

CONTACTS : (a) Infant Scholars. Same period as patient.

(b) Other Scholars :—

I.—If had Whooping Cough. Not to be excluded.

II.—If not had Whooping Cough. Same period as patient.

MUMPS.

PATIENTS : Three weeks.

CONTACTS : Not to be excluded.

CHICKEN POX.

PATIENTS : Three weeks, or until all scabs have disappeared.

CONTACTS : (a) Infant Scholars. Same period as patients.

(b) Other Scholars. Not to be excluded.

ENCEPHALITIS LETHARGICA.

CONTACTS : Three weeks after isolation of patient.

The above periods are liable to alteration in individual cases on instructions from the Medical Officer of Health.

Bacteriological Laboratory.—The following specimens were examined at the Public Health Office :—

Swabs for Diphtheria Bacilli	...	...	...	290
Sputum for Tubercle Bacilli	...	...	...	345
Blood for Widal Reaction	...	...	...	4
Smears for Gonococci	...	...	...	60
Smears for Ophthalmia Neonatorum	...	...	...	27
Spinal Fluid for Tubercle Bacilli	...	...	...	2
Sputum for Pneumococci	...	...	...	7
Hairs for Ringworm	...	...	...	1
Urine for Albumen	...	...	...	14
Blood for Anthrax	...	...	...	2
Swab (Pus) for Tubercle Bacilli	...	...	...	1
Total				753

I estimate that £200 has been saved to the Corporation by the examinations being carried out at the office instead of being sent to other Laboratories.

The Sanatorium.—The number of cases of various diseases treated at the Sanatorium during the year will be seen in the following table :—

				Remaining in at end of 1922.	Admitted during 1923.	Discharged during 1923.	Died during 1923.	Average stay of non-fatal cases.	Average stay of fatal cases.	Remaining in at end of 1923.
Scarlet Fever	...	...	M. F.	5 13	67 77	67 89	1 —	40 38	10 —	4 1
Diphtheria	...	...	M. F.	— 3	12 8	12 9	— —	33 26	— —	— 2
Enteric Fever	...	...	M. F.	2 1	2 2	3 3	1 —	52 57	8 —	— —
Measles	...	...	M. F.	— 1	22 40	22 41	— —	14 16	— —	— —
Puerperal Fever		...	F.	—	9	7	—	33	—	2
Erysipelas	...	...	M. F.	— —	— 4	— 4	— —	— 16	— —	— —
Phthisis	...	...	M. F.	3 —	24 19	17 9	6 3	86 118	40 58	4 7
Other Diseases	...	...	M. F.	1 3	48 55	43 56	1 1	19 14	10 15	5 1
Totals	...	...		32	389	382	13	—	—	26

The total number of cases compares with previous years as follows :—

1923 — 389

1922 — 461

1921 — 365

1920 — 532

1919 — 411

1918 — 537

1917 — 544

1916 — 596

1915 — 663

1914 — 297

1913 — 263

1912 — 217

1911 — 213

1910 — 303

1909 — 477

1908 — 402

1907 — 312

1906 — 306

1905 — 270

By keeping a daily record of all the inmates of the Hospital (patients and staff), I have been able to calculate accurately the cost of the maintenance per head per week. This includes feeding only (groceries, green-groceries, milk, fish, bread and meat), and works out at an average for the year of 7s. 7d. per head per week.

DISINFECTING DEPARTMENT.

Articles Removed from 398 Houses to Sanatorium for Disinfection :—

Sheets, quilts, blankets, &c.	2,212
Articles of clothing	2,252
Pillows and bolsters	1,579
Beds	471
Mattresses	363
Carpets	309
Rugs and mats	146
Curtains	231
Cushions	183
Table cloths	50
Books	103
Miscellaneous articles	746
Articles from Sanatorium	801
Total	9,446

Infectious Diseases—

Inquiries into cases of infectious disease (see Visits and Inspections)	—
Houses disinfected after cases of infectious diseases ...	273
Houses disinfected after cases of consumption	67
Other premises disinfected	86
Isolation notices served upon householders... ..	1,293
Isolation notices served upon School Managers	841
Isolation notices served upon School Attendance Officers .	841
Other notices to School Managers with regard to infectious diseases	915
Other notices to householders with regard to infectious diseases	915
Other notices to School Attendance Officers	915
Notices to Free Library with regard to infectious diseases .	985

Poor Law Relief.—I am obliged to the relieving officers for the following information :—

A SUMMARY OF PERSONS WHO HAVE RECEIVED OUT-RELIEF
IN BLACKPOOL DURING THE YEAR 1923.

Males : 40 temporarily disabled and 45 not able-bodied	...	...	...	...	...	...	85
Females : 55 in health (widows, etc.) with children and 88 not able-bodied	...	...	...	...	...	...	143
Children under 16 years of age	...	...	...	...	...	...	250
Total	...	...	...	...	...	...	478

Use of Voluntary Hospitals, &c.

VICTORIA HOSPITAL, 1923.			
	Medical	Surgical	Total.
In patients ...	212	1,194	1,406
Out ...	142	1,523	1,665
Totals ...	354	2,717	3,071

FOXTON DISPENSARY, 1923.					
	Surgical.		Medical.		Total
	Males.	Females.	Males.	Females.	
Out patients...	54	97	255	401	807

District Nurses.—Two district nurses are employed by the Health Department of the Corporation and their whole time is occupied in district nursing amongst the sick poor of the town. As far as possible they

act under the instructions of the medical practitioners in attendance upon the cases, but in many instances, such as those of chronic bed-ridden cases, doctors are not in attendance, under which circumstances the nurses have to receive their instructions from me or to act according to their own judgment. Their services have been much utilised, and in carrying out their valuable work the large total of 4,609 visits were paid by them.

Ladies' Sick Poor Association.—About 1,238 cases were visited and relieved by the ladies of this Association during the year. Some of the cases were assisted for a few months, others are kept for years, some even as long as 14 and 15 years. The help takes the form of meat, eggs, groceries, clothes, boots, loan of bath chairs, etc., £599 being expended for this purpose during the year.

MATERNITY AND CHILD WELFARE.

The work of this department is classified as follows :—(a) visitation to notified births and expectant mothers, (b) The Maternity and Child Welfare Clinic, (c) provision of midwives and doctors in necessitous cases, (d) Domiciliary Nursing of cases of Ophthalmia Neonatorum, (e) supervision of midwives, and (f) the establishment of a Maternity Home.

Notification of Births Acts.—During 1923, 1,109 births were registered under the Registration Acts within the specified period of six weeks. Of these 1,063, or 95.8 per cent., were notified to me under the Notification of Births Act. The remaining 4.2 per cent. were not notified because of ignorance of the requirements of the Act.

The following table shews the particulars of the births :—

COMPARATIVE TABLE OF BIRTHS REGISTERED AND NOTIFIED.

	Registered under the Registration of Births Acts.	Registered Births Notified to the Medical Officer of Health under Notification of Births Act.	Still Births Notified.
Doctor in attendance at Birth	360	340	11
Doctor and Midwife .	284	264	7
Midwife	458	458	37
Other Persons	1	1	5
No Information	6	—	—
Totals	1,109	1,063	60

Advice has been given on the storage of food and on the feeding and clothing of infants, and a special point has been made of urging upon mothers the importance of persevering with the breast milk even if it has to be supplemented with cow's milk, suitably prepared. Suitable pamphlets and booklets embodying this advice have also been left at most of the houses.

Midwives Act, 1902.—

Total on Register, 31st December, 1922	26
No. who sent in Form VIII. of intention to practice during 1923	28
No. of new Midwives admitted to Roll during 1923	3
No. of Midwives who left the district during 1923...	3
Change of address reported to Central Midwives' Board	5
Notifications received from Midwives :—	
Sending for Medical help	53
Still-Births	44
Death of Child	—
Visits paid by the Medical Officer of Health or Health Visitors	62

Of the 28 midwives on the roll on the 1st January, 1923, 8 are certified because they were in practice for one year prior to the passing of the Act; 1 has the L.O.S. certificate; 2 have the St. Mary's Hospital, Manchester, certificate; and 17 the C.M.B. certificate.

The Maternity and Child Welfare Clinic has been in operation on Monday and Thursday afternoons throughout the year, and Dr. Bartlett has been in medical attendance. Medical and nursing advice has been given to mothers and expectant mothers, and Glaxo has been supplied in suitable cases. The statistical tables on page 38 will reveal a very large amount of work which has been done.

The improved accommodation to which I referred in my last Annual Report, has now been provided, and has greatly facilitated the work of the Clinic. I am pleased to report that the sanction of the Ministry of Health has been received for the appointment of an additional Health Visitor. It is my intention that she should concentrate mainly on pre-natal work, and for this purpose it will be necessary to have an additional Clinic day during the week. I hope to report more fully on this matter in my next Report.

The Maternity Home.—On the 4th February, 1920, the Maternity Home was opened. The original accommodation was for 8 patients, but as this was found to be insufficient, lodgings for the nurses were obtained in adjacent houses, and now up to 12 cases can be accommodated. Up to the end of the year 180 patients were admitted to the Home. 171 of these were delivered by the nursing staff, and 9 by the Medical Officers.

There is no definite allocation of beds for special cases, but those mainly dealt with are (1) those without suitable accommodation at their homes, and (2) those where complications are feared or experienced. There is no differentiation made between legitimate or illegitimate cases. The charges for admission vary from £3 to 5 guineas per week, and there is urgent need for increased accommodation for patients.

In spite, however, of the cramped accommodation for patients and staff much valuable and needed work has been carried out at the Home, and whatever alterations may occur in our Child Welfare Scheme, it is

certain that we can never again be without provision for maternity cases. The question of alternative or improved accommodation for this work is now receiving the earnest consideration of the Health Committee.

Ophthalmia Neonatorum.—47 cases were notified to me during the year. Wherever possible the actual application of treatment to the eyes is carried out by the Health Visitors, for which purpose visits are paid twice daily. All cases completely recovered.

Maternity and Child Welfare Statistical Report of work carried out.—

(a) Visits by Health Visitors—					1922.	1923.
Births—First visits					901	1,004
Subsequent visits					1,479	1,936
Expectant Mothers—First visits ...					162	159
Subsequent visits...					69	36
Still Births					27	27
Deaths					51	52
Puerperal Fever					—	9
Ophthalmia Neonatorum					516	484
Midwives					64	31
Female Outworkers					10	6
Children, other than newly born ...					318	236
Total ...					<u>3,597</u>	<u>3,980</u>
(b) Attendances at Clinic—					1922.	1923.
Expectant Mothers—First visits ...					73	56
Subsequent visits...					25	10
Children—First visits					423	397
Subsequent visits					5,958	6,583
Total ...					<u>6,479</u>	<u>7,046</u>
(c) Supply of " Glaxo " to suitable cases—					1922.	1923.
Supplied free					1,885 packets	4,364 packets
At reduced charge					849 „	1,392 „
At nett actual cost					7,625 „	5,205 „
Total ...					<u>10,359</u> „	<u>10,961</u> „
(d) Provision of Midwives and Doctors—					1922.	1923.
Full Midwife's fee granted					21	18
Half Midwife's fee granted					20	23
Full Doctor's fee granted... ..					4	10
Half Doctor's fee granted					10	4

II.—SANITARY CIRCUMSTANCES OF THE BOROUGH.

Water Supply.—This is under the jurisdiction of the Fylde Water Board. The water is an upland surface water, of a soft and peaty nature. The gathering ground is a good one, and is thoroughly safe-guarded from all risk of animal pollution, and the water is now laid on to every inhabited part of the Borough.

Sewerage.—With the exception of certain outlying portions the whole of the town is sewered. The main portion of the sewage flows by gravitation to the central sewage chamber from which iron and steel outfall pipes, each 3 feet in diameter, carry the sewage out to sea for a distance of 950 yards. The sewage is screened, and is discharged immediately the level of the sea is below the level of the sewage in the storage chambers until $1\frac{1}{2}$ hours before the time of low water. Valves fixed in a pen-stock chamber serve to keep all sea water from the sewage chambers and sewers while the outfall is tide-locked. Storm overflow pipes are provided to relieve the sewage chambers during heavy rains with an in-coming tide, and also a pumping chamber for use if required when the sewerage system is full at high tide.

From two portions of the town it is necessary to pump the sewage into the sewage chamber, and a smaller and separate sewage system is in existence at the northern portion, which flows by gravitation to an outfall which carries the sewage seawards to an extent of 600 yards. The outlet is below the level of the water at all states of the tide, and the discharge is continuous.

Closet Accommodation.—With the exception of the outlying portions of the district which are not sewered, the whole of the town is on the sewerage system. It is proposed, in connection with certain road alterations, to extend the sewers, and this will enable the closets to the houses near to Bispham station to be converted into the water carriage system. At present the sewage from these houses empties into cesspools, and these in their turn are emptied and the contents poured down adjacent manholes into the sewers.

There are 29,399 water closets in the town, about 60 cesspools, and about 20 privies.

Scavenging.—This is carried out by the Cleansing Department of the Corporation. As all the inhabited portions of the town are on the water carriage system the collection and disposal of excreta other than by this system is small in quantity. The cesspools and privies, where they exist, are emptied and cleaned at least once a week.

With regard to household refuse, galvanised iron bins with tight-fitting covers are the most satisfactory of all forms of receptacles and these are the forms which are being encouraged by my department. I am informed by the Cleansing Superintendent that during the season a daily collection was carried out at the Hotels, Hydros, Restaurants, and the larger Boarding-houses, whilst from the ordinary Company-houses the refuse is removed from two to three times a week. With a slight modification requisite for meeting the reduced demand in connection with Company-houses, this system is maintained during the winter months. The refuse collected is dealt with at the Destructor, and during the year 30,224 tons were destroyed.

With regard to the **inspection of ash-receptacles** by my department, the following work has been carried out :—

TOTAL NUMBER OF VISITS MADE	...	...	...	...	5,043
Satisfactory ash receptacles	...	...	...	...	1,137
Unsatisfactory ash receptacles	...	...	...	...	1,353
Re-inspections of houses under notice	...	...	...	...	2,471

TOTAL NUMBER OF NOTICES SERVED—	Preliminary.	Statutory.
(A) To abolish modified ashpits...	22	—
(B) To repair modified ashpits ...	80	15
(C) To provide galvanised ashbins	1,296	170
Total number of modified ashpits repaired	...	76
„ ashpits abolished	...	5
„ galvanised ashbins provided	...	1,311
„ informations laid	...	3,877
„ modified ash receptacles abolished	...	32

Sanitary Inspection of the District.—This is under the supervision of the Chief Sanitary Inspector, who has submitted to me the following statistical statement of the work carried out by him and his assistants :—

COMPLAINTS RECEIVED	...	...	...	...	...	...	582
VISITS AND INSPECTIONS (TOTAL)	...	...	...	...	...	...	16,276
Number of houses fully inspected	...	...	...	...	...	...	1,164
Number of inspections of works in progress	...	...	...	...	...	...	3,155
Visits to houses and other premises	...	...	...	...	...	...	3,368
Re-inspections in relation to nuisances under notice	...	...	...	...	...	...	1,708
Inspections of basements	...	...	...	...	...	...	233
Inspections of manure heaps	...	...	...	...	...	...	889
Sands inspections	...	...	...	...	...	...	177
Visits and enquiries in relation to infectious diseases	...	...	...	...	...	...	2,942
Enquiries into deaths	...	...	...	...	...	...	281
Smoke observations (half-hour duration each)	...	...	...	...	...	...	55
Visits to tents, vans, and sheds	...	...	...	...	...	...	421
Inspections of back passages	...	...	...	...	...	...	150
Offensive trades...	...	...	...	...	...	...	271
Inspections under Rats and Mice Destruction Order	...	...	...	...	...	...	1,462

NOTICES SERVED FOR THE ABATEMENT OF NUISANCES—

Statutory	...	...	...	...	...	...	107
Preliminary	...	...	...	...	...	...	726
Verbal	...	...	...	...	...	...	163

HOUSE DRAINS TESTED—Total number of tests made 1,520

NEW HOUSES EXAMINED—

Drains	{	satisfactory	...	...	...	...	728
	{	unsatisfactory on first test	...	...	...	...	26
	{	rendered satisfactory after first test	...	...	...	...	23
W.C.'s	{	satisfactory	...	...	...	...	865
	{	of defective construction	...	...	...	...	16
Ash receptacles	{	satisfactory	...	...	...	...	451
	{	unsatisfactory	...	...	...	...	320
Site of house	{	satisfactory	...	...	...	...	822
	{	unsatisfactory	...	...	...	...	—

OTHER HOUSES (1st Test)	satisfactory	...	...	...	42
Drains	unsatisfactory	...	...	...	117
House drains re-tested during re-laying	...	...	...	...	542

HOUSES PASSED OFF AS SATISFACTORY AFTER DRAINAGE DEFECTS REPAIRED	...	...	...	...	...	...	173
NUMBER OF HOUSES WHERE SANITARY DEFECTS WERE FOUND							846
NUMBER OF HOUSES WHERE SANITARY DEFECTS WERE REMEDIED							878
NUMBER OF SANITARY DEFECTS REMEDIED	...	...	...				2,423

Drains—

Drains laid, re-laid, disconnected, and ventilated	...	...	55
Drains repaired and cleaned out	...	...	513
New Gullies fixed	...	...	8

W.C.'s—

New w.c.'s fixed in lieu of privies, pail closets, and defective w.c.'s	...	...	...	...	...	...	51
Water closets repaired	...	...	...	...	...	...	39
Water closets unblocked	...	...	...	...	...	...	40
Fittings and water provided for w.c.'s	...	...	...	...	...	...	122
W.C. soil pipes repaired and ventilated	...	...	...	...	...	...	24

WASTE PIPES—

Bath, lavatory, slopstone and rainwater pipes disconnected over gullies	...	...	...	...	...	...	—
New slopstone waste pipes fixed	...	...	...	...	...	...	21
New rainwater pipes fixed	...	...	...	...	...	...	8
Rainwater pipes and roof gutters repaired	...	...	...	...	...	...	166
Slopstone waste pipes repaired	...	...	...	...	...	...	47

MISCELLANEOUS—

Houses cleansed and limewashed	...	...	...	...	...	43
Floors re-laid with flags	...	...	...	...	...	1
Floors re-laid with concrete	...	...	...	...	...	14
Back yards repaired	...	...	...	...	...	91
Back yards flagged or concreted	...	...	...	...	...	3
Back passages cleansed	...	...	...	...	...	13
Accumulations removed	...	...	...	...	...	181
Animals removed from improper situations				...	...	34
Roofs repaired	...	...	...	...	...	130

MISCELLANEOUS—Contd.

Rooms ventilated	...	...	...	...	...	...	76
Yards cleansed	...	...	...	...	...	...	15
Watercourses cleansed	...	...	...	...	...	...	50
Overcrowding ceased	...	...	...	...	...	...	5
Manure Receptacles Abolished	...	...	...	...	...	...	—
„ „ Provided	...	...	...	...	...	...	1
Sundry minor defects remedied	...	...	...	...	...	...	671
Number of manholes, gullies, etc., reported to Cleansing Superintendent	...	...	...	...	...	...	126
Back streets requiring forming reported	...	...	...	...	...	...	4
Erections in yards, etc., reported	...	...	...	...	...	...	19

The above statement does not comprise a large number of visits paid in respect of portions of the work of the Department which are dealt with in this Report under special headings.

Factory and Workshops Act, 1901.—There are 333 Factories in the Borough, and through the courtesy of the Inspector of Factories I am able to give the following classification :—

Building and Furnishing Trades	...	...	...	...	47
Preparation of Food and Drink	...	...	...	...	132
Manufacture of Wearing Apparel	...	...	...	...	56
Printing and Bookbinding	...	...	...	...	23
Engineering	...	...	...	...	36
Lighting	...	...	...	...	12
Laundries and Cleaning Works	...	...	...	...	13
Miscellaneous	...	...	...	...	34
Total	...	...	...	...	<u>333</u>

There are 568 workshops in the Borough, and their classification is given in Table 4, on page 45.

During the year 46 workshops were discontinued, and 42 new workshops were added to the register. Of the 42 new workshops, 9 were dressmakers, 9 tailors, 5 milliners, and 6 boot repairing. One of the workshops included in the 1922 Report has been converted into a factory.

1.—INSPECTION OF FACTORIES, WORKSHOPS, AND WORKPLACES.

PREMISES.	Number of		
	Inspections	Written Notices	Prosecutions
Factories (Including Factory Laundries)	38	5	—
Workshops (Including Workshop Laundries)	465	15	—
Workplaces (Other than Outworkers' Premises included in Part 3 of this Report)	543	4	—
TOTAL	1,046	24	—

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS, AND WORKPLACES.

PARTICULARS	Number of Defects					Number of Prosecutions.
	Not Reme- died 1922.	Found.	Remedied 1923.	Not Reme- died 1923.	Referred to H.M. Insp'r.	
NUISANCES UNDER THE PUBLIC HEALTH ACTS :—						
Want of cleanliness	8	89	93	4	—	—
Want of ventilation	2	5	5	2	—	—
Overcrowding	1	1	2	—	—	—
Want of drainage of floors	—	—	—	—	—	—
Defective drains	—	12	12	—	—	—
Other nuisances	4	17	16	5	—	—
Sanitary { insufficient	1	5	6	—	—	—
Accom- { unsuitable or defective ..	—	4	4	—	—	—
modation { not separate for sexes ...	1	—	1	—	—	—
OFFENCES UNDER THE FACTORY AND WORKSHOP ACT :—						
Illegal occupation of underground bake- house (s. 101)	—	—	—	—	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100) ...	—	17	17	—	—	—
Other offences	2	2	4	—	—	—
(Excluding offences relating to out- work, which are included in Part 3 of this Report) ...						
TOTAL	19	152	160	11	—	—

3.—HOME WORK.

NATURE OF WORK. (1)	OUTWORKERS' LISTS, SECTION 107.					
	Lists received from Employers.					
	Twice in the year			Once in the year.		
	Outworkers			Outworkers		
	Lists (2)	Con- trac- tors. (3)	Work men (4)	Lists (5)	Con- trac- tors. (6)	Work men (7)
Wearing Apparel :—						
Making, &c.	19	30	—	—	—	—
Umbrellas, &c.	2	2	—	—	—	—
Total.....	21	32	—	—	—	—

Inspections of Outworkers' premises	...	...	8
Addresses of Outworkers received from other authorities			4
do. forwarded to other authorities			3

4.—REGISTERED WORKSHOPS.

Workshop on the Register (s. 131) at the end of the year.					Number.
Important class of workshops, such as workshop bake- houses, may be enumer- ated here.	Making of wearing apparel	...	...	...	222
	Workshop bakehouses	...	...	...	188
	Preparation of other foods	...	...	...	9
	Building trades .....	...	...	...	41
	Furniture making, etc.	...	...	...	28
	Conveyances	...	...	...	4
	Other Trades	...	...	...	73
	Laundry Workshops	...	...	...	3
Total number of workshops on Register .					568

5.—OTHER MATTERS.

CLASS.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts, (S.133) 	2
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) {	Notified by H.M. Inspector —
	Reports (of action taken) sent to H.M. Inspector. —
Other 	1
Underground bakehouses (s. 101) :—	
In use at the end of the year 	3

It will be observed from the preceding tables that 1,046 visits were paid by the Inspectors during the year, and the sanitary conditions have been kept under close supervision. This total includes 543 visits to workplaces, but not the visits to slaughter-houses. 152 defects were detected, 19 were still requiring attention at the commencement of the year, and of these 160 were remedied, leaving 11 still requiring attention at the commencement of 1924. Circular letters were sent out at the beginning of February and August, asking for lists of outworkers. The premises of the outworkers were visited twice during the year, and were found in a satisfactory condition.

Offensive Trades.—The following exist in the Borough:—

Blood Drier at Public Slaughter-House	...	...	...	...	1
Tripe Boilers	„	„	...	...	2
Gut Scraper	„	„	...	...	1
Hide, Skin, and Fat Depots	„		...	...	2
Rag and Bone Depots	...	...	...	...	3
Fried Fish Shops	...	...	...	...	95

It is satisfactory to note that all the offensive trades, with the exception of Rag and Bone, and Fried Fish businesses, are at the Abattoirs, where the effluvia emitted by them is not observed by any large body of people. They are also under daily observation by the Superintendent of the Abattoirs and the Meat Inspector.

It will be observed that I am able to give the number of Fried Fish Shops in the town. This business is now an "offensive trade," and no new business may be established without the consent of the Sanitary Authority, under an Order, which came into operation on the 13th March, 1914. The number of fish friers premises on the register during 1923 was 95.

Common Lodging-Houses.—Under the Blackpool Improvement Act, 1901, sec. 47, the common lodging-houses, previously existing were re-registered. These houses, with their accommodation, are as follows :—

Eden Street : 160 adults and 1 child.

Seed Street : 56 adults and 1 child.

544 visits of inspection were paid, and it was found on the whole that the lodging-houses were kept in a cleanly condition, and managed satisfactorily.

Sands Inspections.—I have again to report a very satisfactory condition of the foreshore, and the improvement referred to in my previous reports has been well maintained. The screening apparatus at the north and south outfalls are in full working order, and have proved highly satisfactory in so far as the effects in cleansing the sands has been observed by Inspectors of my department. 177 inspections were made.

Basement Dwellings.—These, as regards numbers and unsuitability for habitation as separate tenements, are much as in former years. Many of the middle and back basements are inadequately lighted and ventilated, and when alternative accommodation is available for the occupants, legal powers will have to be sought prohibiting their use as separate tenements.

Schools.—I do not hold the position of School Medical Officer, and a special report dealing with this part of the work of the Corporation is issued by the Education Committee.

The Sanitation of the schools is under my supervision. The premises are satisfactory and no structural alterations of a sanitary nature were carried out during the year. The questions of school closures, school exclusions for Infectious Diseases, and the disinfection of school premises, are dealt with in other portions of this report.

PROSECUTIONS IN 1923.

MONTHS.	ACT.	DETAILS OF OFFENCE.	RESULT.
February	Sec. 112, Public Health Act, 1875 ; Sec. 51, Public Health Act Amendment Act, 1907 ; and Blackpool Order, 1914.	Establishing Fried Fish Business without sanction.	Fined £2 for establishing and 10s. for carrying on business, including costs.
September .	Sale of Food and Drugs Acts	Milk Deficient of 43% of its fats.	Fined £1 and 17s. 6d. costs
October	Sec. 13, Nuisance Bye Laws.	Failure to remove manure	Fined £1 in each of two cases, without costs.

FOOD.

(a) **Milk Supply.**—The production and distribution of milk is entirely in private hands. I look forward to the time when the Municipality will organise and take under its own direction the milk supply. The milk supplied to the town has, on the whole, been good in quality, but there is still room for improvement in the cleanliness of the article.

The following is a list of the milksellers in the Borough :—

Milkshops selling by retail	...	...	...	...	59
Provision dealers selling by retail	...	...	...	...	69
Butchers selling by retail	...	...	...	...	2
Persons meeting farmers' carts and delivering milk direct, not taking it home	...	...	...	...	44
Tea rooms and sweet shops selling in glasses as refreshments when asked for	...	...	...	...	20
Dining rooms selling milk in glasses when asked for					6
Selling sterilised milk	...	...	...	...	2
					<hr/> 202
No. of cowsheds in the Borough during 1923, the occupiers of which sold milk during the year...					49
Ice cream dealers	...	...	...	...	221

The number of Farmers outside the Borough bringing milk into the Borough was, until recently, 163, but now many of them are sending their milk in by Carriers and Wholesale Dealers, and have ceased to retail it themselves. At present there are 146 sending milk in by Carriers and Retailers.

During 1923, as seen on page 53, 109 visits were paid to cowsheds within the Borough, 290 to milkshops and dairies, 675 to ice cream stalls and work-places, and 48 to restaurant kitchens.

66 milk dealers, and 75 ice cream dealers, applied for registration during the year.

66 samples of milk which was brought from outside the Borough for sale or consumption within the Borough were submitted for bacteriological examination for the presence of Tubercle Bacilli, all of which were found by microscopical and inoculation tests to be free.

Fourteen samples of Ice Cream were examined, seven of which were unsatisfactory.

With regard to milk produced within the Borough, Messrs. Hutchinson & Walker, our Veterinary Surgeons, have continued, as in past years, to examine all the cows within the Borough at least once each quarter. The following is a statement submitted by them upon the subject :—

“ The Cattle, on the whole, are in very good condition.

“ The average number of Cattle inspected each quarter is 764, with an average of 570 milk cows.

“ Fourteen cows have been found to be suffering from Tuberculosis, eight generalised, and six with Tuberculosis of the Udder.

“ Five cases of Chronic Mammitis were slaughtered.

“ Four cases of Actinomycosis were treated successfully.

“ Four outbreaks of Foot and Mouth Disease were discovered, all the animals—268 in number were slaughtered—including 112 cattle, 83 pigs and 73 sheep. 47 cattle and 62 pigs were affected with the disease, and were cremated.”

Other Foods.—The following is a list of shops in the Borough where food is exposed for sale :—

Where Butchers' Meat is sold	...	...	...	194
Meat Stalls	...	...	...	17
Fish Shops	...	...	...	47
Grocery and Provisions	...	...	...	347
Confectioners' Shops...	...	...	...	152
Restaurants and Cafes	...	...	...	93
Fruit Shops	...	...	...	99
Tripe Shops	...	...	...	15
Oyster Stalls	...	...	...	12
Fish and Chip Shops	...	...	...	95
				1,071

Slaughter-Houses.—There exist in the Borough the Corporation Abattoirs and one private slaughter-house.

The following animals were slaughtered at the Abattoirs :—

	1922.	1923.
Cows	214	249
Heifers	2,975	3,761
Bullocks	2,032	1,632
Bulls	103	51
Calves	1,662	1,729
Sheep	62,382	58,497
Pigs	1,494	1,223
	70,862	67,142

The following were surrendered and destroyed from the Corporation Abattoir :

(A) TUBERCULOSIS—

1 Bullock and full Offal	...	...	544lbs.
3 Calves do.	...	...	220lbs.
6 Cows do.	...	...	2,580lbs.
4 Heifers do.	...	...	1,880lbs.
9 Pigs do.	...	...	1,049lbs.
19 Beasts' full Offal	...	...	930lbs.
15 Beasts' Plucks, Hearts and Livers	...	...	371lbs.
2 Pigs' Plucks, Hearts and Livers	...	...	14lbs.
4 Pigs' Heads and full Offal	...	...	96lbs.
1 Forequarter Beef and full Offal	...	...	170lbs.
1 Body Beef (Heifer)	...	...	434lbs.
			————— 8,288lbs.

(B) UNFIT FOR FOOD, OTHER THAN TUBERCULOSIS—

PLEURISY—1 Calf and full Offal	...	...	35lbs.
FLUKES—Livers of 32 Beasts	...	...	407lbs.
CIRRHOSIS—Livers of 34 Beasts	...	...	383lbs.
INFLAMMATION—2 Sheep and full Offal	...	...	97lbs.
1 Ewe do.	...	...	60lbs.
1 Lamb do.	...	...	35lbs.
1 Heifer's Pluck and Heart	...	...	15lbs.
TUMOUR—2 Heifers' Heads and Tongues	...	...	50lbs.
DROPSY—1 Calf and full Offal	...	...	41lbs.
3 Cows do.	...	...	1,178lbs.
4 Sheep do.	...	...	136lbs.
ABSCCESS—Livers of 22 Beasts	...	...	356lbs.
EMACIATED—1 Cow and full Offal	...	...	250lbs.
1 Sheep do.	...	...	42lbs.
BRUISED—Beef	...	...	723lbs.
BRUISED—Lamb	...	...	81lbs.
UNSOUND—Sirloin and Steak	...	...	53lbs.
Pigs Pluck and Liver	...	...	7lbs.
26 Sheep and Lambs, died in transit, in pens, or suffocated	...	...	1,005lbs.
DIRTY—1 Cow's Pluck, Melt and Liver	...	...	24lbs.
IMMATURE—6 Calves and full Offal	...	...	192lbs.
			————— 5,170lbs.

FOOD SURRENDERED FROM PRIVATE SLAUGHTER HOUSES OUTSIDE
THE BOROUGH—

1 Body of Beef ...	...	...	980lbs.
1 Heifer and Offal ...	...	...	493lbs.
1 Hindquarter Beef ...	...	...	224lbs.
			————— 1,697lbs.

FOOD SURRENDERED FROM SHOPS, ETC., IN THE BOROUGH—

TUBERCULOSIS—

13 Pigs ...	...	2,001lbs.
43 Pigs' Heads and Plucks ...	...	826lbs.
4 Pigs' Plucks only ...	...	16lbs.
2 Forequarters Beef ...	...	240lbs.
1 Chicken ...	...	2lbs.
		————— 3,085lbs.

DECOMPOSITION—

3 Hindquarters Beef ...	...	346lbs.
2 Forequarters Beef ...	...	373lbs.
Fillet of Beef ...	...	101lbs.
3 Pigs' Liver ...	...	10lbs.
4 Tins Corned Beef ...	...	24lbs.
Pork ...	...	84lbs.
		————— 938lbs.

ABSCCESS—1 Pig's Head ...	...	...
SWINE FEVER—29 Pigs ...	...	670lbs.
IMPERFECTLY BLED—1 Pig ...	...	80lbs.
NECROSIS—1 Pig's Liver ...	...	11lbs.
CIRRHOSIS—1 Pig's Liver ...	...	9lbs.
DROPSY—2 Pigs ...	...	73lbs.
BONE TAINT—Beef ...	...	80lbs.

UNWHOLESOME—

44 Pheasants.		
1 Barrel Crabs.		
2 Salmon ...	...	32lbs.
Figs ...	...	33lbs.
Plums ...	...	1,176lbs.
Raspberry ...	...	150lbs. 2,314lbs.
Pears ...	...	16 cases.
Frozen Lamb Kidneys ...	...	600
Rabbits ...	...	20
Walnuts ...	...	3 bags.

Private Slaughter-Houses.—There is only one Private Slaughter-House in the town, apart from the Public Abattoirs, which existed in the area amalgamated to the town since 1914.

The following visits in connection with the general Food Supply were paid during the year :—

				1922.	1923.
Milkshops and dairies	...	...	...	261	290
Cowsheds in the Borough	...	...	...	131	109
Cowsheds out of the Borough	...	...	...	4	1
Ice cream stalls	...	...	...	116	222
Ice cream workshops	...	...	...	225	453
Public slaughter-houses	...	...	...	195	89
Other slaughter-houses in the Borough	...	...	...	39	48
Other slaughter-houses out of the Borough	...	...	...	33	78
Butchers' shops	...	...	...	1,408	3,237
Other shops	...	...	...	645	925
Restaurants	...	...	...	88	48
				<hr/>	<hr/>
				3,145	5,500

In all cases where vendors of food have any doubt as to the quality of any article they are invited to send to the Health Office, when the Medical Officer of Health or Food Inspector will at once call and pass an opinion on the article. This arrangement continues to be largely taken advantage of.

It is very desirable that the Corporation should have powers to require the licensing or registration of all premises where human food is prepared, stored, or sold. The necessity also of clearing houses for meat brought in from outside districts has already been commented upon.

Sale of Food and Drugs Acts.—Mr. Sanderson, the Chief Sanitary Inspector is the Sampling Officer under these Acts. During the year 202 samples were taken, of which it will be observed, only one was "informal."

Informal Samples Number.		Nature of Sample.	Formal Samples Number.	
Taken.	Not Genuine		Taken.	Not Genuine.
—	—	Butter	29	—
—	—	Cheese	9	2
—	—	Coffee	23	—
—	—	Corn Flour	1	—
—	—	Cream	6	—
1	—	Cream Cheese	—	—
—	—	Cream of Tartar	1	—
—	—	Jam, Damson	5	—
—	—	Jam, Raspberry	2	—
—	—	Jam, Red Plum	1	—
—	—	Lard	20	—
—	—	Marmalade	1	—
—	—	Meat, Potted	1	1
—	—	Milk	74	7
—	—	Pepper, White	14	—
—	—	Rice	1	—
—	—	Sausage	2	2
—	—	Shrimps (Potted)	1	1
—	—	Sugar	4	—
—	—	Tea	6	—
1	—		201	13

REMARKS.

Cheese.—One sample was deficient of 6 per cent. of its fat, whilst the second non-genuine sample was deficient of $6\frac{1}{2}$ per cent. of fat. Warning letters were sent to the Vendors of these samples pointing out the adverse reports of the Analyst, and requesting them to take steps necessary to ensure that their cheese complies with the necessary standard.

Meat, Potted.—The sample contained Boric Acid, 10 grains per pound.

Milk.—With regard to the samples of Milk returned as non-genuine, they were all in respect of deficiency of cream. In six instances warning letters were sent to the Vendors, but in the seventh case in which the Milk was deficient of 43 per cent. of its fat, legal proceedings were instituted and resulted in the Vendor being fined £1 and 17s. 6d. costs.

Potted Shrimps.—This sample contained Boric Acid, 20 grains per pound. No action was taken.

Sausage.—The two non-genuine samples each contained Boric Acid, 10 grains per pound. The cases were reported to the Health Committee. No further action was taken.

Milk and Cream Regulations.

	Number of Samples examined for the presence of a Preservative.	Number in which Preservative was reported to be present, and percentage of Preservative found in each sample.
Milk Cream	74 6	Nil. Complied with Regu- lations 6
Instances in which Samples have been submitted for Analysis to ascertain if the Statements on the label as to preservatives were correct :—		
I. Correct Statements made ...		6
II. Incorrect Statements ...		—
Percentage of Preservative found in each sample		Complied with Regulations.
Percentage stated on Statutory Label		Complied with Regulations.
Determination made of Milk Fat in Cream sold as Preserved Cream :—		
I. Above 35 per cent.		6
II. Below 35 per cent.		Nil.
Instances where (apart from Analysis) the requirements as to labelling or declaration of Preserved Cream in Article V. (1), and the Proviso in Article V. (2) of the Regulations have not been observed		
Particulars of each case in which the Regulations have not been com- plied with, and action taken ...		—
Thickening substances. Any evi- dence of their addition to Cream or Preserved Cream. Action taken where found		Nil.

HOUSING.

I am indebted to the Borough Treasurer for supplying me with the number of inhabited and uninhabited houses during the Autumn enumeration, and for the sake of comparison I give the corresponding figures for the years since 1903.

The figures for 1923 were obtained by an enumeration held during February, 1924.

NUMBER OF HOUSES.

	Empty.	Inhabited.	Total.
1923	619	19,288	19,907
1922	270	18,392	18,662
1921	375	17,708	18,083
1920	403	17,085	17,488
1919	144	16,848	16,992
1918	34	16,877	16,911
1917	27	16,016	16,043
1916	77	15,963	16,040
1915	105	15,682	15,787
1914	130	15,096	15,226
1913	121	14,784	14,905
1912	282	14,209	14,491
1911	298	13,714	14,012
1910	207	13,361	13,568
1909	200	12,994	13,194
1908	171	12,607	12,778
1907	153	12,334	12,487
1906	191	12,053	12,224
1905	188	11,789	11,977
1904	272	11,494	11,766
1903	309	11,181	11,490

In my Annual Report for 1921, I made the following observation :—
 “The housing shortage . . . has to some extent been met by the Municipal Scheme.” Experience during the past two years, however, has proved that the provision of houses suitable for the working classes has been only partially solved. There is urgent need for a large number of new houses, and in my last year’s Report I specified the figure as “immediate need for 400,” and I have no reason to amend this figure. It will be

noted from the above table that increase in the total number of houses in 1923 over 1922, is 1,245. Only a small proportion of these new houses are suitable for working class dwellings.

The overcrowding consequent upon housing shortage has not revealed itself in any outburst of infectious or epidemic diseases, but it cannot fail to have a deleterious effect upon the public health.

The following are the requisite statistics upon the Housing question.

1.—GENERAL.

(1) Estimated population	...	...	...	...	...	75,130
(2) General death-rate	...	...	...	...	...	14.43
(3) Death-rate from Tuberculosis	...	...	...	...	...	0.61
(4) Infantile Mortality	...	...	...	...	...	70.3

2.—UNFIT DWELLING-HOUSES.

I.—INSPECTION.

(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts, and including the inspection of 754 new houses prior to occupation).	...	...	...	...	913
(2) Number of dwelling houses which were inspected and recorded under the housing (Inspection of District) Regulations, 1910.	...	...	...	...	410
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	...	...	...	...	—
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	...	...	...	...	107

II.—REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	673
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III.—ACTION UNDER STATUTORY POWERS.

A. *Proceedings under section 28 of the Housing, Town Planning, &c., Act, 1919.*

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	45
(2) Number of dwelling-houses which were rendered fit—	
(a) by owners	123
(b) by Local Authority in default of owners	22
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	Nil.

B. *Proceedings under Public Health Acts.*

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	59
(2) Number of dwelling-houses in which defects were remedied—	
(a) by owners	49
(b) by Local Authority in default of owners	Nil.

C. *Proceedings under sections 17 and 18 of the Housing, Town Planning, &c., Act, 1909.*

(1) Number of representations made with a view to the making of Closing Orders	Nil.
(2) Number of dwelling-houses in respect of which Closing Orders were made	Nil.
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit... ..	Nil.

(4) Number of dwelling-houses in respect of which Demolition Orders were made	Nil.
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	Nil.

3.—UNHEALTHY AREAS.

Areas represented to the Local Authority with a view to Improvement Schemes under (a), Part I., or (b) Part II., of the Act of 1890 :—

(1) Name of area	Nil.
(2) Acreage	Nil.
(3) Number of working-class houses in area ...	Nil.
(4) Number of working-class persons to be displaced.	

4.—Number of houses not complying with the building byelaws erected with consent of Local Authority under section 25 of the Housing, Town Planning, &c., Act, 1919	Nil.
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INSPECTION OF NEW HOUSES.—The procedure adopted with regard to new houses remains as in previous years, viz., the Borough Surveyor notifies me of the completion of the building. The houses are then examined by my department, and reports thereon made and sent to the Borough Surveyor. 754 new houses were examined during the year, and in all of them the sites were concreted. In 26 cases the drains were unsatisfactory on the first test, and it was necessary that some alteration should be made to them. In 16 cases the closets were of unsatisfactory construction. In the tabulated statement on page 41, it states that 320 new houses were without ash receptacles, but this is due to the fact that in these cases the landlords had delayed providing them until the tenants actually came into occupation.

Meteorology



The Blackpool observatory is 70 feet above mean sea level, and its geographical position is Lat. $53^{\circ} 49' N.$, and Long. $3^{\circ} 3' W.$

The pre-war publication of observations is now resumed, and daily telegrams are issued, which secure insertion in the press.

The equipment of the observatory is, as in former years, and the list of instruments is given in earlier reports.

SUNSHINE.—Bright sunshine amounted to 1,332.8 hours, or 205.1 hours below the average for the years 1904-1923. The daily mean value was 3.65 hours, as compared with 4.00 in 1922. Sunshine was recorded on 301 days, and the sunniest days were June 2nd and May 29th, with 14.1 and 14.0 hours respectively. The brightest months were May and July, with 176.3 and 154.5 hours respectively.

RAIN.—The rainfall for the year was 41.22, or 7.39 above the average for the years 1904-1923. Rain fell on 246 days, and the months with the heaviest fall were August (6.02), November (4.82), and October (4.73). The heaviest fall of rain in one day was 1.47, on the 27th July.

GALES.—Seven gales occurred during the year, viz. on January 10th, February 7th, May 11th, August 2nd, November 4th and 15th, and December 18th. In gusts the highest wind velocity was 64 miles per hour, on the 15th November.

SNOW fell on five days, viz., February 18th, 21st, December 4th, 25th and 26th. **HAIL** fell on 12 days. **THUNDERSTORMS** occurred on six occasions, viz., July 7th, August 21st, 22nd, September 1st, November 15th and 16th.

BAROMETRIC PRESSURE. The highest observed reading was 1,036.9 m.b., on the 25th January, and the lowest was 964.7 m.b., on the 27th February. The greatest monthly range of pressure occurred in February (54.7 m.b.), and the smallest in June (21.1 m.b.).

TEMPERATURE.—The highest temperature recorded in the shade was 85°F. on the 6th of July, and the lowest was 25°F. on the 25th December. The highest temperature recorded by the black bulb solar radiation thermometer was 135°F. on the 17th July, and the lowest temperature recorded on the grass was 12°F. on April 24th.

MIST occurred on January 17th and 23rd, February 12th, and December 31st.

HUMIDITY.—The mean relative humidity throughout the year was 85.1% of saturation. The lowest record was 76% for the month of April, and the highest was 94% for the month of January.

UNDERGROUND TEMPERATURE.—The highest temperature recorded at a depth of one foot was 63.4°F., on the 13th of July, and the lowest was 37.4°F., on the 27th of December. At a depth of four feet the highest record was 57.7°F., on August 14th, and the lowest was 43.4°F., on February 28th.

WIND.—From daily observations made at 9 a.m., the following direction was recorded :—N. 17, N.E. 20, E. 34, S.E. 43, S. 34, S.W. 72, W. 89, N.W. 48, Calm 8.



INDEX

	PAGE.		PAGE.
Actinomycosis	50	District Nursing	34-35
Area of Borough	4	Empty Houses	4-57
Area of Foreshore	4	Enteric Fever	19-20-21-32
Area of Wards	5	Enteritis	18
Anaemia	11	Encephalitis Lethargica	19-20
Animals slaughtered	50	Erysipelas	19-20-32
Appendicitis	11	Estimated Population	4-58
Apoplexy	11	Factory and Workshops	
Ash receptacles	40	Act	43-46
Bacteriological Laboratory	31	Food and Drugs Acts	48-54
Barometric Pressure	61	Food Supply	49-50-51
Basement Dwellings	47	Food Preservatives	55
Births	5-6	Foot and Mouth Disease... ..	50
Birth Rate... ..	5-6-7	Foreshore. Area of	4
Birth Rate Chart	7	Foxton Dispensary	34
Births. Notification of	35-36	Fylde Guardians' Institu-	
Borough Rate	4	tion. Deaths	8
Bright's Disease	11	Gales	61
Bronchitis	11-18	General District Rate	4
Cancer Deaths	11-13-14	General Statistics	4
Cattle. Inspection of	50	Health Committee	3
Causes of Deaths	10-11	Health General Sub-Com-	
Census Population	4	mittee	3
Cerebro Spinal Meningitis	19-20	Health Visiting	38
Cheese. Sample of	54	Heart. Diseases of	11
Chickenpox	20-21	Housing and Town Plan-	
Child Birth Mortality	5	ning, &c.	57-60
Closet Accommodation	39	Houses Empty	4-57
Common Lodging Houses	47	Houses Inhabited	4-57
Convulsions	18	Humidity	62
Cowsheds in Borough	53	Ice Cream	49-53
Cowsheds out of Borough	53	Illegitimate Births	5-8
Deaths	5-8	Infant Mortality 5-12-15-16-17-18	
Death Rates	5-9-12	Infant Mortality Chart	15
Death Rate Chart	9	Infantile Debility	18
Deaths in Wards	12	Infectious Diseases 19-20-21-32-33	
Deaths. Causes of	10-11	Infectious Diseases Hos-	
Deaths under One Year		pital	31
5-12-15-16-17-18		Influenza	11-21
Density of Population	4	Inhabited Houses	4-57
Diarrhoea Deaths	5-18	Inquests	12
Diabetes	11	Ladies' Sick Poor Associa-	
Diphtheria... ..	18-19-20-21-32	tion	35
Disinfections	33	Legitimate Births... ..	5

INDEX (Continued).

	PAGE.
Mammitis	50
Maternity and Child Welfare	35-36-37-38
Maternity and Child Welfare Sub-Committee ...	3
Maternity Home	37
Measles	5-19-20-21-32
Measles. Deaths	5-20
Meat, Potted	55
Midwives on Roll	36
Milk and Cream Regulations	56
Milk Samples	49-54-55
Milk Shops	49-53
Mist	62
Meteorology	61-62
Mumps	30
New Houses. Inspection of	41-60
Notification of Births	35-36
Offensive Trades	46-48
Old Age	11
Ophthalmia Neonatorum	19-21-38
Out-door Relief	34
Outworkers	44-45
Penny Rate	4
Persons per Acre	4
Population Census	4
Population. Density	4
Population. Estimated	4
Population of Wards	5
Polio Myelitis	19-20
Poor Law Relief	34
Pneumonia	11-18-20-21
Premature Births	18
Preservatives in Food	55
Prosecutions	48
Puerperal Fever	19-20-21-32
Rainfall	61
Rateable Value	4
Rats and Mice Order	41
Registration of Births	36

	PAGE.
Restaurants	49-53
Rotheln	19-20
Sale of Food and Drugs Acts	48-54
Sanatorium	31
Sands Inspection	47
Sanitary Inspection	40-41-42-43
Sausage Sample of	55
Scarlet Fever	19-20-21-32
Scavenging	40
Schools. Closure of	29
Schools. Exclusion	29-30
Schools. Sanitation of	47
Sewerage	39
Shrimps. Sample of	55
Slaughter Houses	50-51-52-53
Smallpox	19-21
Snow	61
Stillbirths	36
Sunshine	61
Temperatures	62
Tuberculosis	11-19-21-23-24-25-32-51-58
Typhus Fever	19
Uncertified Deaths	12
Underground Temperatures	62
Unsound Food	51-52
Venereal Diseases	26-27-28
Veterinary Surgeons' Report	50
Victoria Hospital	34
Violence. Deaths from	10
Vital Statistics	5
Vital Statistics. Other Towns	12
Voluntary Hospitals	34
Wards. Population of	5
Water Supply	39
Whooping Cough	5-18-20
Whooping Cough. Deaths	5-20-21
Wind	62

